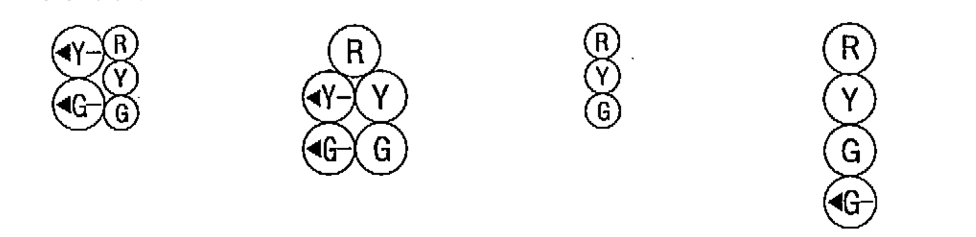
MD 147 IS ASSUMED TO RUN
IN A NORTH-SOUTH DIRECTION.

EXISTING SIGNALS



CONSTRUCTION DETAILS

A. INSTALL OVERHEAD VIDEO DETECTION CAMERA ON EXISTING MAST ARM.

B. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS PUSHBUTTONS. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL HEADS FOR BOTH CROSSINGS. INSTALL APS STATION AND PEDESTRIAN EDUCATION SIGN FOR PUTTY HILL CROSSING.

C. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH APS STATION, AND PEDESTRIAN EDUCATION SIGN. THE POLE SHALL BE CUT ABOVE THE PEDESTRIAN EDUCATION SIGN. (INSTALL 1-3 IN. PVC SCHEDULE 80 CONDUIT BENDS).

D. INSTALL 3" PVC SCHEDULE 80 - TRENCHED PRIOR TO SIDEWALK POUR.

E. INSTALL HANDHOLE.

F. INSTALL 2-4" AND 2-2" PVC SCHEDULE 80 CONDUITS - TRENCHED.

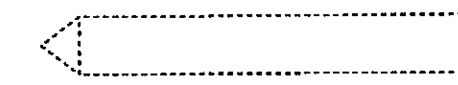
G. DISCONNECT AND ABANDON EXISTING LOOP DETECTOR. REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.

PROPOSED SIGNS

29

W9-2(4) MOD
30"X42"

PROPOSED EQUIPMENT



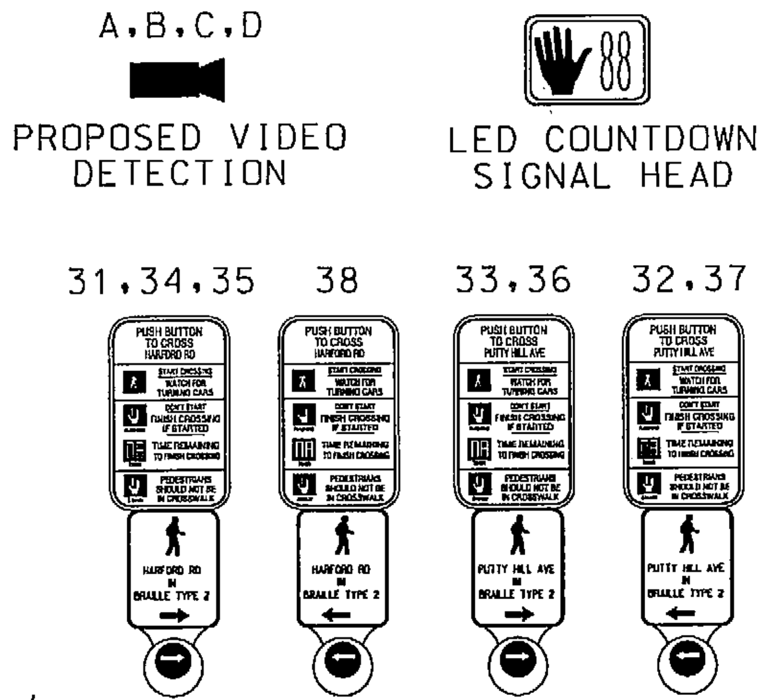
VIDEO CAMERA DETECTION ZONE

A,B,C,D

PROPOSED VIDEO DETECTION

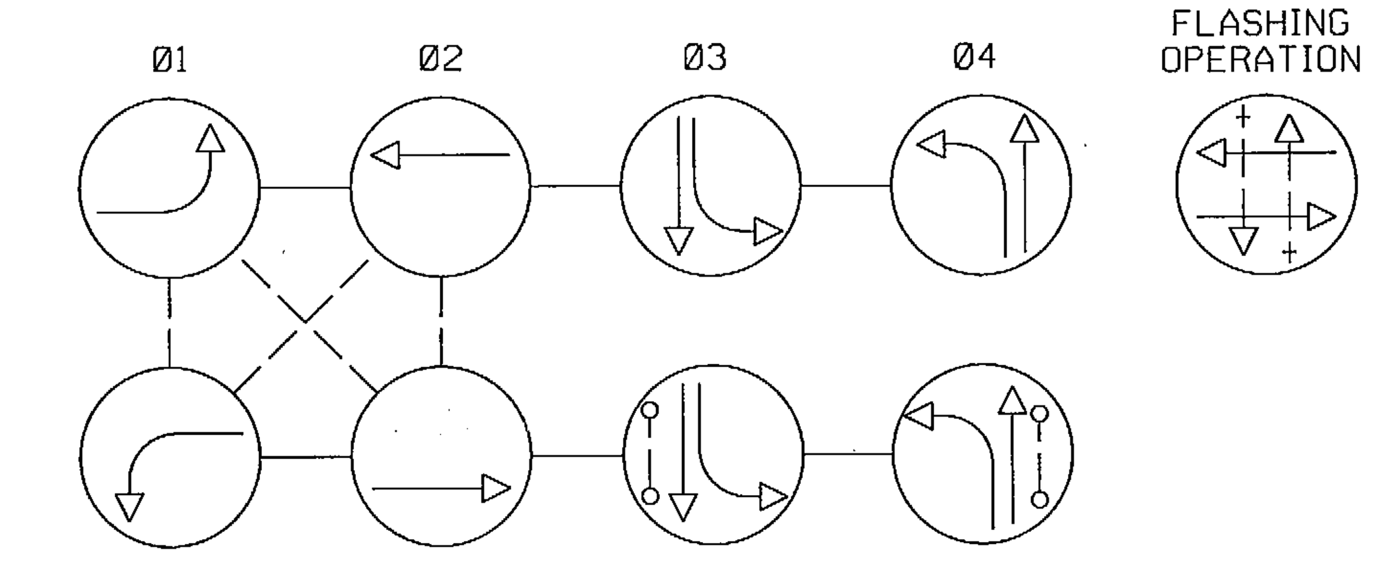
13-20

LED COUNTDOWN SIGNAL HEAD



R10-3(1) 9"X15"
APS 5"X7"

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

CONSTRUCTION DETAILS (cont.)

H. INSTALL MICROLOOP PROBE WITH 500' LEAD-IN.

J. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS PUSHBUTTONS. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL HEADS FOR BOTH CROSSINGS. INSTALL APS STATION AND PEDESTRIAN EDUCATION SIGN FOR HARFORD ROAD CROSSING.

K. USE EXISTING HANDHOLE.

L. USE EXISTING POLE MOUNTED CONTROLLER CABINET.

M. USE EXISTING CONDUIT.

N. INSTALL 4" PVC SCHEDULE 80 - SLOTTED.

O. INSTALL 12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.

P. INSTALL 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.

Q. REMOVE EXISTING HANDHOLE, CAP AND ABANDON EXISTING CONDUIT.

R. INSTALL 1" LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT. (FOR DETECTOR WIRE SLEEVE).

EXISTING SIGNS TO REMAIN

Putty Hill AVE

Harford RD

23,24: D3-2 (DUAL FACED) 16" X VARIABLE

21,22: W16-7pL 36" X 36" — W16-11 36" X 36" — W16-7pR 36" X 36"

25,26: D3-2 (DUAL FACED) 16" X VARIABLE

27,28: W16-7pR 36" X 36" — W16-11 36" X 36" — W16-7pL 36" X 36"

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITIY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
5. ALL UNUSED SIGNAL CABLES SHALL BE REMOVED AND DISPOSED.
6. THE TACTILE ARROW FOR THE AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTONS SHALL BE LOCATED PARALLEL TO THE CROSSWALK FOR WHICH THEY APPLY.
7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SIGNAL OPERATION DURING THE COMPLETE CONSTRUCTION PERIOD.

T3 DESIGN, P.C.
3927 OLD LEE HWY
SUITE 101-C
FAIRFAX, VA 22030
PHONE: 703-359-5861
www.t3design.us

BY: amym

UTILITY LEGEND

Symbol	Description
——SD——SD——	STORM DRAIN
—— G —— G ——	GAS MAIN
—— W —— W ——	WATER MAIN
—— S —— S ——	SEWER MAIN
—— E —— E ——	ELECTRIC CABLES
—— A —— A ——	AERIAL CABLES
—— T —— T ——	TELEPHONE CABLES
—— F —— F ——	FIBER-OPTIC

APPROVALS: TEAM LEADER / ASST. DIV. CHIEF / DIVISION CHIEF / OFFICE DIRECTOR — ORIGINAL ON FILE

REVISIONS: SHA NO. BA6835184 ADDENDUM NUMBER 5 12/12/06 — JRL | AJM | PAT

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 147 HARFORD ROAD AND
PUTTY HILL AVENUE

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE NOT AVAIL. CONTRACT NO. NOT AVAIL.

DESIGNED BY ______ COUNTY BALTIMORE
DRAWN BY NOT AVAIL. LOGMILE ______
CHECKED BY NOT AVAIL. T.I.M.S. NO. ______
F.A.P. NO. ______ TOD NO. ______

DRAWING NO. SG - 2.7 OF 2.12 SHEET NO. 241 OF 291

PLOTTED: Wednesday, December 06, 2006 AT 04:06 PM
FILE: Z:\Project\06-0003 WRA MdSHA\Task 02 Harford Rd\CADD\06-PS&E Plans\pSG-P007_m147.dgn